

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Currently Amended): A combustion catalyst for removing organic compound(s), which comprises a first catalyst comprising alumina containing at least one of the elements of the platinum group, and a second catalyst comprising a mixture of zeolite with a metal oxide, wherein the metal oxide is loaded with at least one of the elements of the platinum group;

the alumina of the first catalyst has a pore size distribution such that where "a" represents a pore radius in Å at the maximum of the pore radius distribution curve, the accumulated pore volume of pores having radii in the range of $(a - 25)$ Å to $(a + 25)$ Å is at least 65% of the total volume of all the pores, said alumina containing less than 1% by weight of rare earth elements: and wherein

said first catalyst and said second catalyst ~~being are not mixed together and are~~ arranged in a manner such that organic compound(s) to be removed is/are contacted first with the first catalyst and then with the second catalyst.

Claim 2 (Previously Presented): The combustion catalyst according to claim 1, wherein the ratio of the first catalyst to the second catalyst is in the range from 1:20 to 2:1 by weight.

Claim 3 (Previously Presented): The combustion catalyst according to claim 1, wherein the ratio of zeolite to the metal oxide loaded with at least one of the elements of the platinum group in the mixture of the second catalyst is in the range from 20:1 to 1:20 by weight.

Claim 4 (Previously Presented): The combustion catalyst according to claim 1, wherein the zeolite is ion-exchanged with at least one ionic species selected from the group consisting of those of the groups IA and IIA.

Claim 5 (Previously Presented): The combustion catalyst according to claim 1, wherein the metal oxide in the second catalyst is alumina having pore size distribution such that, where "a" represents a pore radius in Å at the maximum of the pore radius distribution curve, the accumulated pore volume of pores having radii in the range of (a - 25) Å to (a + 25) Å is at least 65% of the total volume of all the pores, said alumina containing less than 1% by weight of rare earth elements.

Claim 6 (Canceled).

Claim 7 (Previously Presented): A process for removing organic compound(s) by catalytic combustion comprising the step of contacting organic compound(s) with the combustion catalyst as claimed in claim 1, so that the organic compound(s) is/are contacted first with the first catalyst of the combustion catalyst and then with the second catalyst of the combustion catalyst.

Claim 8 (Previously Presented): The process according to claim 7, wherein the ratio of the first catalyst to the second catalyst is in the range from 1:20 to 2:1 by weight.

Claim 9 (Currently Presented): The process according to claim 7, wherein the ratio of the zeolite to the metal oxide loaded with at least one of the elements of the platinum group in the mixture of the second catalyst is in the range from 20:1 to 1:20 by weight.

Claim 10 (Previously Presented): The process according to claim 7, wherein the zeolite is ion-exchanged with at least one ionic species selected from the group consisting of those of groups IA and IIA.

Claim 11 (Previously Presented): The process according to claim 7, wherein the metal oxide in the second catalyst is alumina having a pore size distribution such that, wherein "a" represents a pore radius in Å at the maximum of the pore radius distribution curve, the accumulated pore volume of pores having radii in the range of $(a - 25)$ Å to $(a + 25)$ Å is at least 65% of the total volume of all the pores, said alumina containing less than 1% by weight of rare earth elements.

Claim 12 (Canceled).

Claim 13 (Previously Presented): The process according to claim 7, wherein the organic compound(s) comprise(s) at least one halogen-containing organic compound.

Claim 14 (Previously Presented): The process according to claim 7, wherein the organic compound(s) show(s) a vapor pressure of 0.001 kPa or higher at a temperature of 293.15°K.

Claim 15 (Previously Presented): The process according to claim 7, wherein a gas containing the organic compound(s) is/are contacted with the combustion catalyst, the organic compound(s) being present in a concentration of not greater than 1% by volume in said gas.

Claim 16 (Previously Presented): The process according to claim 7, wherein the organic compound(s) comprise(s) at least one C₂ hydrocarbon.

Claim 17 (Previously Presented): The process according to claim 7, wherein the organic compound(s) comprise(s) at least one chlorinated C₂ hydrocarbon.

Claim 18 (Previously Presented): The combustion catalyst according to Claim 1, wherein the zeolite has an SiO₂/Al₂O₃ molar ratio of 10 or greater.

Claim 19 (Previously Presented): The process according to claim 7, wherein the zeolite has an SiO₂/Al₂O₃ molar ratio of 10 or greater.

Claim 20 (Previously Presented): The combustion catalyst according to claim 1, wherein the zeolite is ion-exchanged with calcium ion.

Claim 21 (Previously Presented): The process according to claim 7, wherein the zeolite is ion-exchanged with calcium ion.

Claim 22 (Previously Presented): The combustion catalyst according to claim 1, wherein the alumina and the metal oxide contain platinum.

Claim 23 (Previously Presented): The process according to claim 7, wherein the alumina and the metal oxide contain platinum.

Claim 24 (Previously Presented): The combustion catalyst according to claim 1, wherein the organic compound(s) is/are hydrocarbon(s) which is/are unsubstituted or substituted by at least one of halogen and oxygen.

Claim 25 (Previously Presented): The process according to claim 7, wherein the organic compound(s) is/are hydrocarbon(s) which is/are unsubstituted or substituted by at least one of halogen and oxygen.